CLAIMS

What is claimed is:

1. A method of communicating between a client computer process and an agent computer program having an embedded web server comprising the steps of:

a) receiving a request for at least one web page associated with the agent computer program; and

b) in response to the request, using the web server to provide the requested web page for use by the client computer process to receive information from the agent computer program or to issue an instruction to the agent computer program.

2. The method of Claim 1 further comprising:

using the web server to provide the requested web page for use by the client computer process to issue an instruction to the agent computer program; and

modifying the behavior or status of the agent computer program based on the instruction.

3. The method of Claim 1 further comprising:

the client computer process initiating contact with the agent computer program by utilizing

a web address of at least one of web page of the agent computer program.

4. The method of Claim 3 further comprising:
the agent computer program initiating contact with the client computer process by specifying a web address associated with the client computer process; and
agent computer program requesting approval of the client computer process for a proposed action by the agent computer program.

5. The method of Claim 1 wherein the agent computer program includes a profile web page for providing static information associated with the agent computer program.

6. The method of Claim 1 wherein the agent computer program includes a status web page for providing dynamic information associated with the agent computer program.

7. The method of Claim 1 wherein the agent computer program includes an instruction web page for receiving at least one instruction from the client computer process.

8. The method of Claim 1 wherein the method is utilized by dynamic agent computer programs in an automated electronic commerce infrastructure.

9. A method of communicating between at least two dynamic agent computer programs comprising the steps of:

a) receiving a message;

b) accessing a document type description (DTD) of the message and decoding the message by using the DTD;

c) determining an interpreter associated with the message;

d) determining whether the currently loaded interpreter in the agent computer program matches the interpreter required for the current message;

e) if no, dynamically load the interpreter needed to interpret the current message; and

f) the loaded interpreter using an associated parser to translate the contents of the message into executable machine code.

10. The method of Claim 9 wherein executable machine code comprises a tree of Java objects that perform the program operations and functions.

11. The method of Claim 9 wherein executable machine code performs the requested action and sends any

requested information to the requesting agent via a return message.

12. The method of Claim 9 wherein the method is utilized by dynamic agent computer programs in an automated electronic commerce infrastructure.

13. An agent computer program comprising:

a) a mechanism for enabling communication between the agent computer program and at least one other computer process; and

b) an inter-agent communication mechanism for enabling the agent computer program to communicate with other agents; wherein the inter-agent communication mechanism employs documents written in a predetermined markup language.

14. The agent computer program of claim 13 wherein the mechanism for enabling communication between the agent computer program and at least one other computer process includes

a web server embedded in the agent computer program for using a predetermined Internet communication protocol to communicate with the computer process; wherein the web server processes incoming and outgoing data that is formatted according to the predetermined Internet communication protocol; and

at least one web page associated with the agent computer program for use by a computer process to communicate information therewith.

15. The agent computer program of claim 13 wherein predetermined Internet communication protocol is the HyperText Transport Protocol (HTTP).

16. The agent computer program of claim 13 wherein the predetermined markup language is the extensive markup language (XML).

17. The agent computer program of claim 13 further comprising:
a profile web page for providing static information associated with the agent computer program.

18. The agent computer program of claim 13 further comprising:
a status web page for providing dynamic information associated with the agent computer program.

19. The agent computer program of claim 13 further comprising:
an instruction web page for receiving at least one instruction from a client computer process.

20. The agent computer program of claim 13 wherein the agent computer program is a dynamic agent computer program that is employed in an automated electronic commerce infrastructure.